REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons which follow.

Claims 1-7, 9, 10 and 12-14 are currently being amended.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, are presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-14 are pending in this application.

In the Office Action, the specification was objected to for editorial errors and lack of concise, clear language. Applicant has reviewed the specification and has amended the same to address this objection. It is noted that the fifth control number of times before the present time is supported in paragraph No. [0034]. That is to say, the calculation process shown in Fig. 2 is a timer interrupt routine executed whenever a predetermined control period of time ΔT (for example, 10 milliseconds) has passed. One control number of times is ΔT. Hence, the velocity detected at the "fifth control number of times" is expressed as V_{F5} since ΔT has passed five times. See also figure 4 of the Applicant's drawings. Regarding the phrase "predetermined distance β during the stop of the host vehicle," this refers to the distance (e.g. 2 meters) between the host and preceding vehicles during a stop. Paragraph [0081] makes reference to the Background of the Invention section as well to support this description. Claims 1-14 were rejected under 35 U.S.C. § 112 second paragraph as being ambiguous. The claims have been amended as set forth herein to address any potential issues under 35 U.S.C. § 112. Accordingly, in view of the foregoing comments and the amendments to the claims, the objection to the specification and the rejection of the claims under 35 U.S.C. § 112 have been overcome.

Also in the Office Action, claims 1-14 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Nakamura et al. (U.S. Patent No. 6,044,321) in view of Tamatsu (U.S. Patent No. 6,317,073). For at least the reasons set forth herein, this rejection has been overcome.

Nakamura et al. disclose an intelligence cruise control (ICC) system capable of maintaining a inter-vehicle distance allowing a collision to be avoided and carrying out follow-up running control. However, Nakamura et al. describe that when the ICC system forms a judgment that deceleration of the vehicle is insufficient if only deceleration based on the engine brake is used, giving rise to fear of a rear-end collision of the vehicle with the preceding car, the ICC system calculates a target deceleration and operates an automatic brake unit, letting the automatic brake unit generate a braking force appropriate for the target deceleration.

In contrast in the Applicant's invention and as recited in the claims, a delay providing section provides a delay for one of the detected velocities of the vehicle and the preceding vehicle which is used to set the target inter-vehicle distance at a time of a detection of one of the velocities of the vehicle and the preceding vehicle which is used to set the target inter-vehicle distance. Then, a target inter-vehicle distance setting section sets the target inter-vehicle distance on the basis of the detected velocity for which the delay is provided by the delay providing section. Clearly, the primary reference, Nakamura et al. does not disclose, teach or suggest these features of the claimed invention.

The secondary reference, Tamatsu et al. disclose the cruise control system having the radar producing the first spectrum using a portion of a beat signal in a frequency rising range wherein the frequency of the radar wave decreases and a second spectrum using a portion of the beat signal in a frequency falling range wherein the frequency of the radar wave decreases and moves the frequency and moves the second spectrum by frequency shifts which are determined as the function of speed of the radar-mounted vehicle.

Applicant has reviewed the statements in the Office Action regarding this reference and has reviewed the sections of the reference cited in the Office Action, specifically, the paragraphs starting from column 17, line 58 to column 18, line 3 of Tamatsu et al. The relevant portion of the reference describes that the "first corrected basic frequency shift is further corrected for compensating for a delay in response data of the vehicle speed sensor 3b. Typically, vehicle speed sensors are designed to measure time intervals between pulse signals outputted from a pulse generator installed on a wheel or a drive line of the vehicle to determine the speed of the vehicle. In practice, an output signal of the vehicle speed sensor 3b is filtered in time sequence to remove noise, thereby resulting in a time lag between the output of the pulse signals from the pulse generator and output of the vehicle speed sensor 3b. . . . [T]he time lag depends on the type of vehicle. The basic time lag depends on an actual vehicle speed and a time constant of a filter installed in the vehicle speed sensor 3b and is defined here as speed delay Dv."

While the Office Action asserts that the "delay" recited in the claims of the present application is disclosed in the above-cited portion of the reference, Applicant respectfully submits that Tamatsu et al. describe merely the delay (Dv) of the vehicle speed sensor (3b) itself. In contrast, in the case of the Applicant's invention, one of the detected vehicular velocities of the vehicle and the preceding vehicle, which is used to set (calculate) the target inter-vehicle distance at the time of detection, is delayed. Neither Nakamura et al. nor Tamatsu et al. alone or in combination disclose, teach or suggest such feature of the claimed invention. The rejection under 35 U.S.C. § 103(a) should be reconsidered and withdrawn.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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Date

Ankur D. Shah
Registration No. 41,514

FOLEY & LARDNER
Washington Harbour
3000 K Street, N.W., Suite 500
Washington, D.C. 20007-5109
Telephone:(202) 672-5300
Facsimile:(202) 672-5399